



Kelut volcano plume evolution as seen by OMPS/LP

Didier Rault

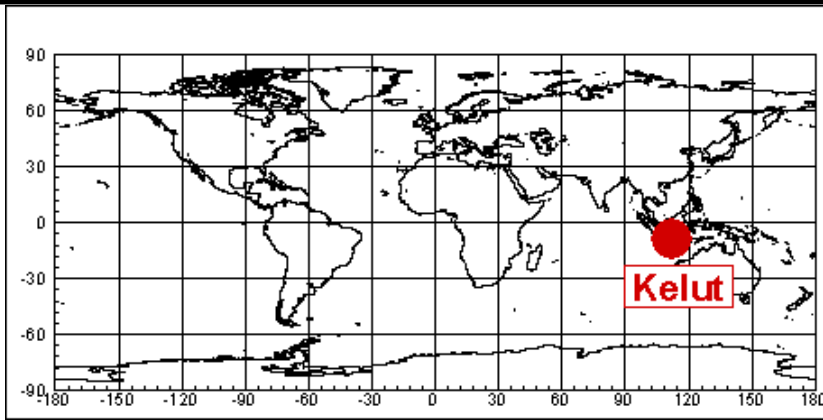
GESTAR / MSU

ST meeting, May 29, 2014

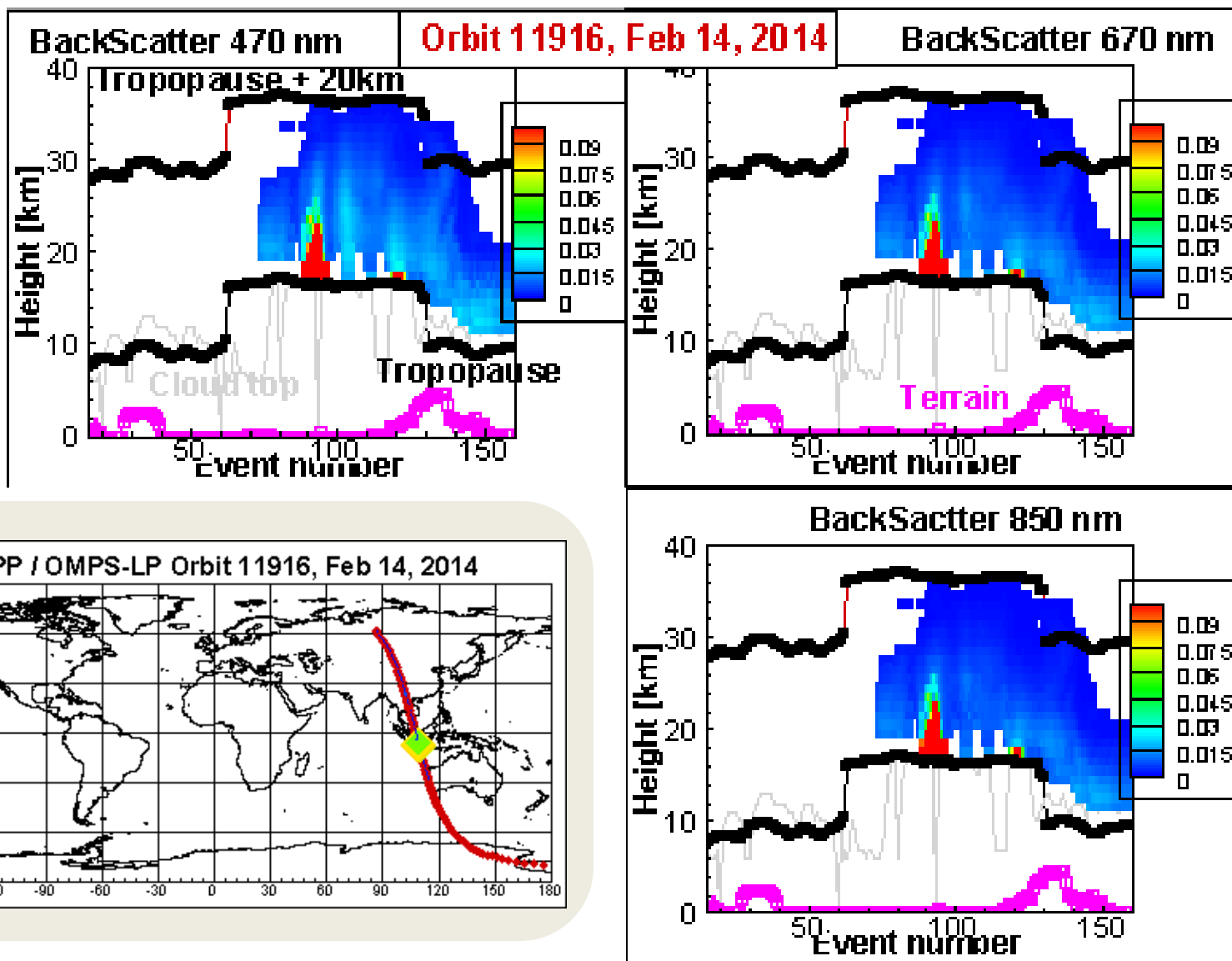
Kelut volcano



- Eruption on Feb 14, 2014
- Witnessed by numerous satellites (CALIPSO, MODIS, VIIRS,...)
- Plume tracked since eruption by CALIPSO and OMPS/LP

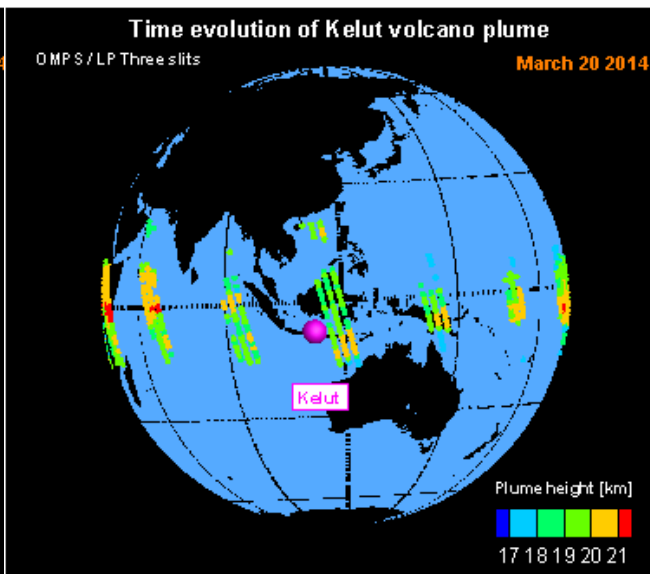
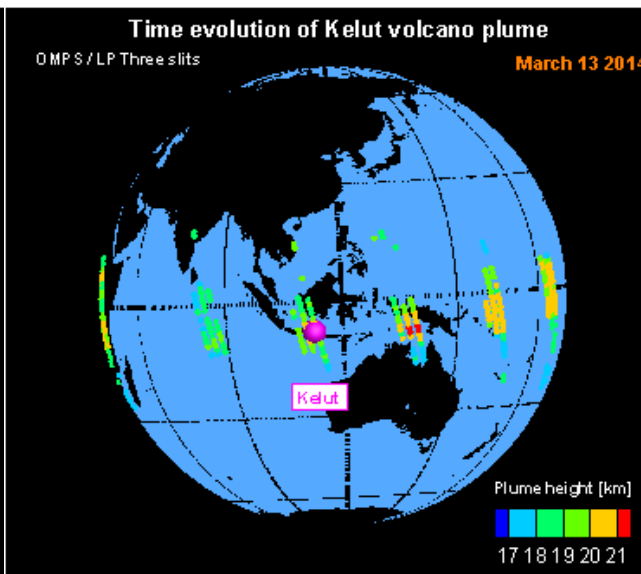
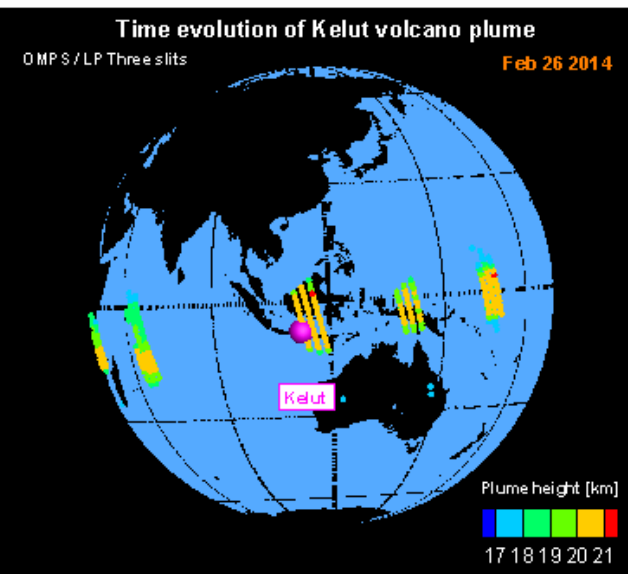
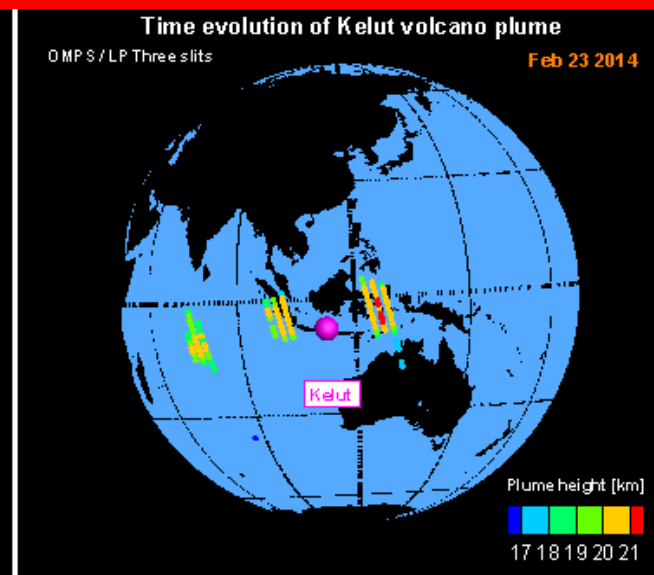
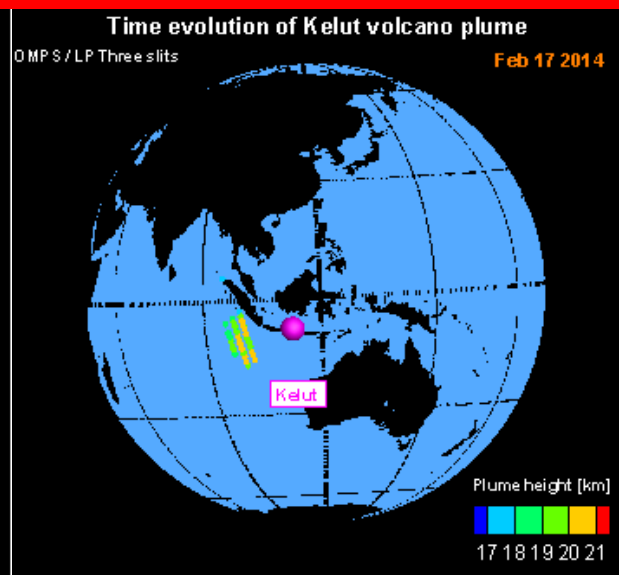
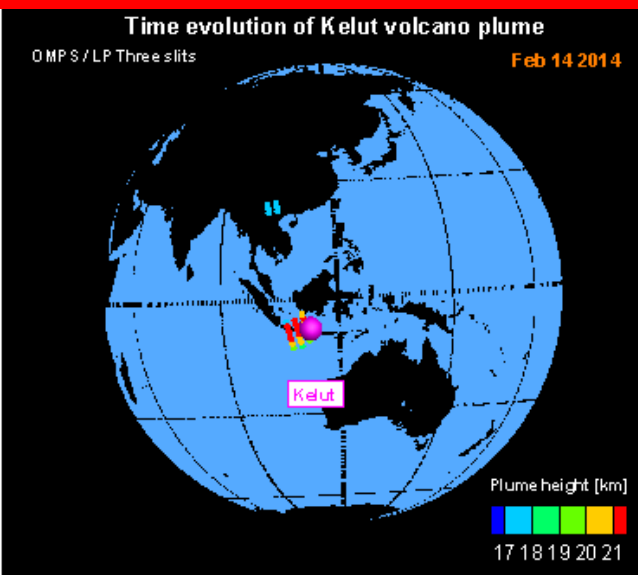


OMPS/LP Back Scatter Ratio

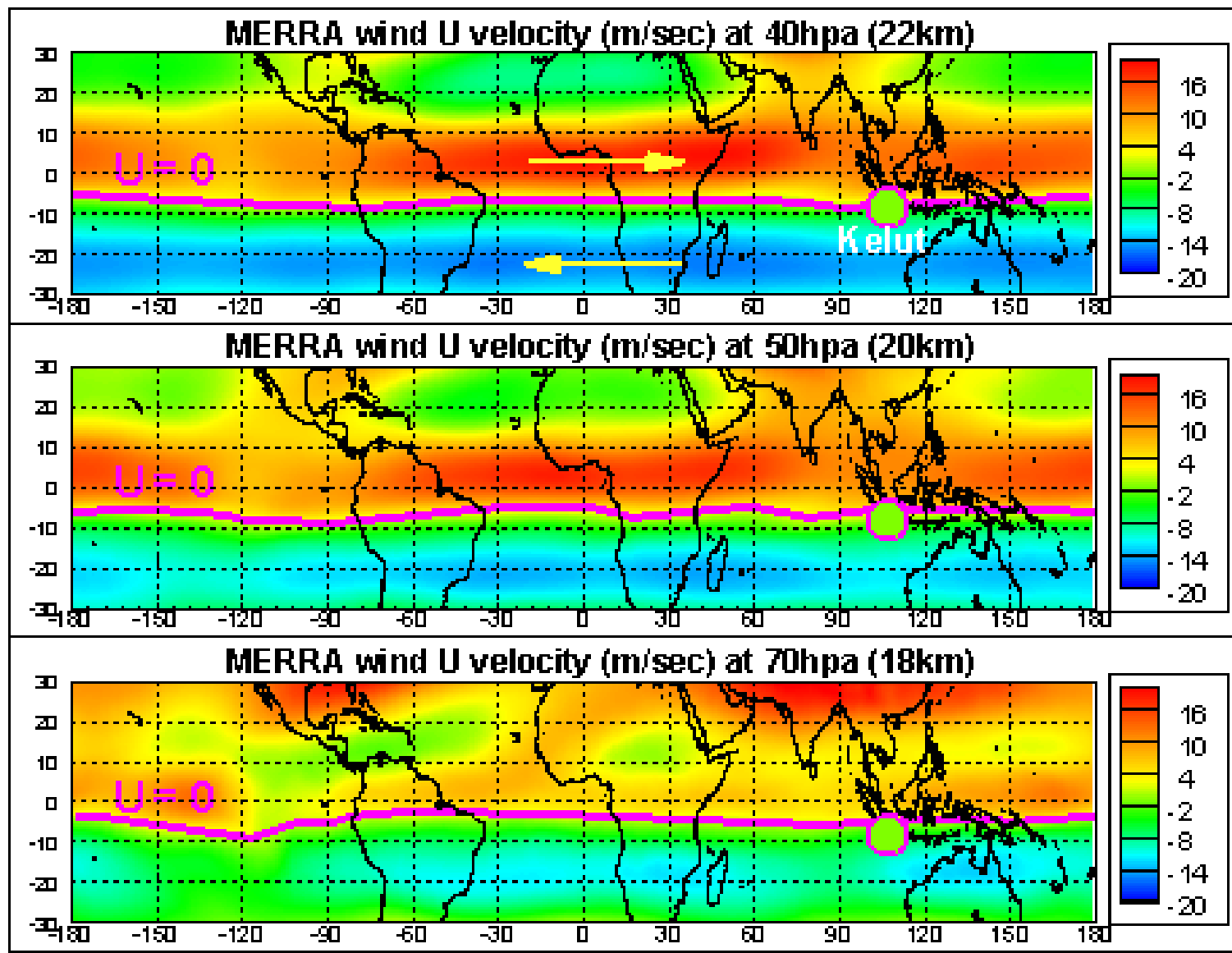




Kelut plume early evolution from Feb 14 to March 20, 2014

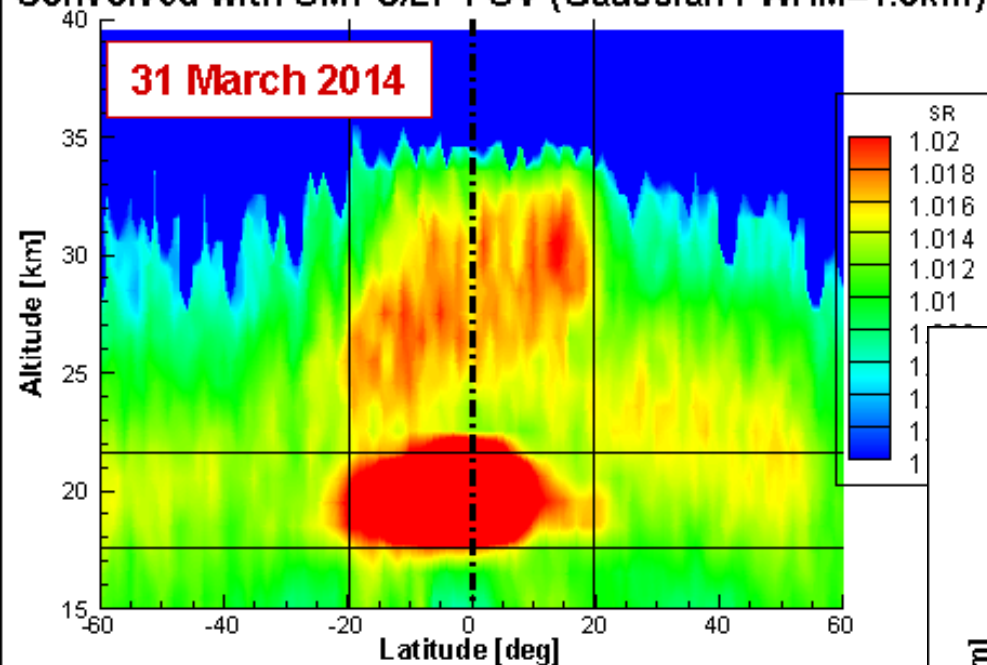


MERRA winds

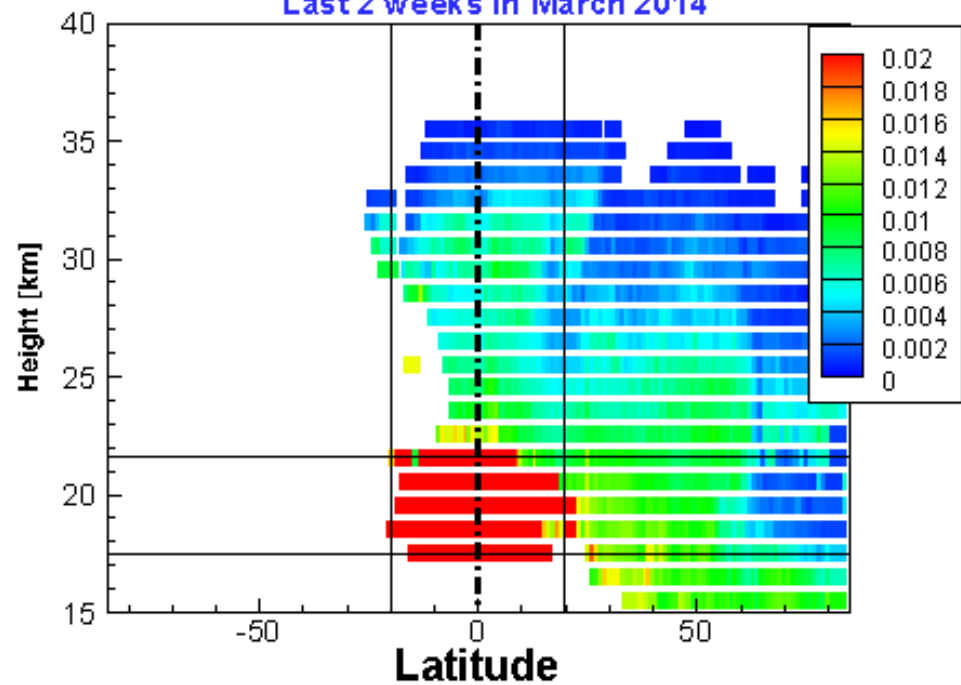


Comparison with CALIPSO

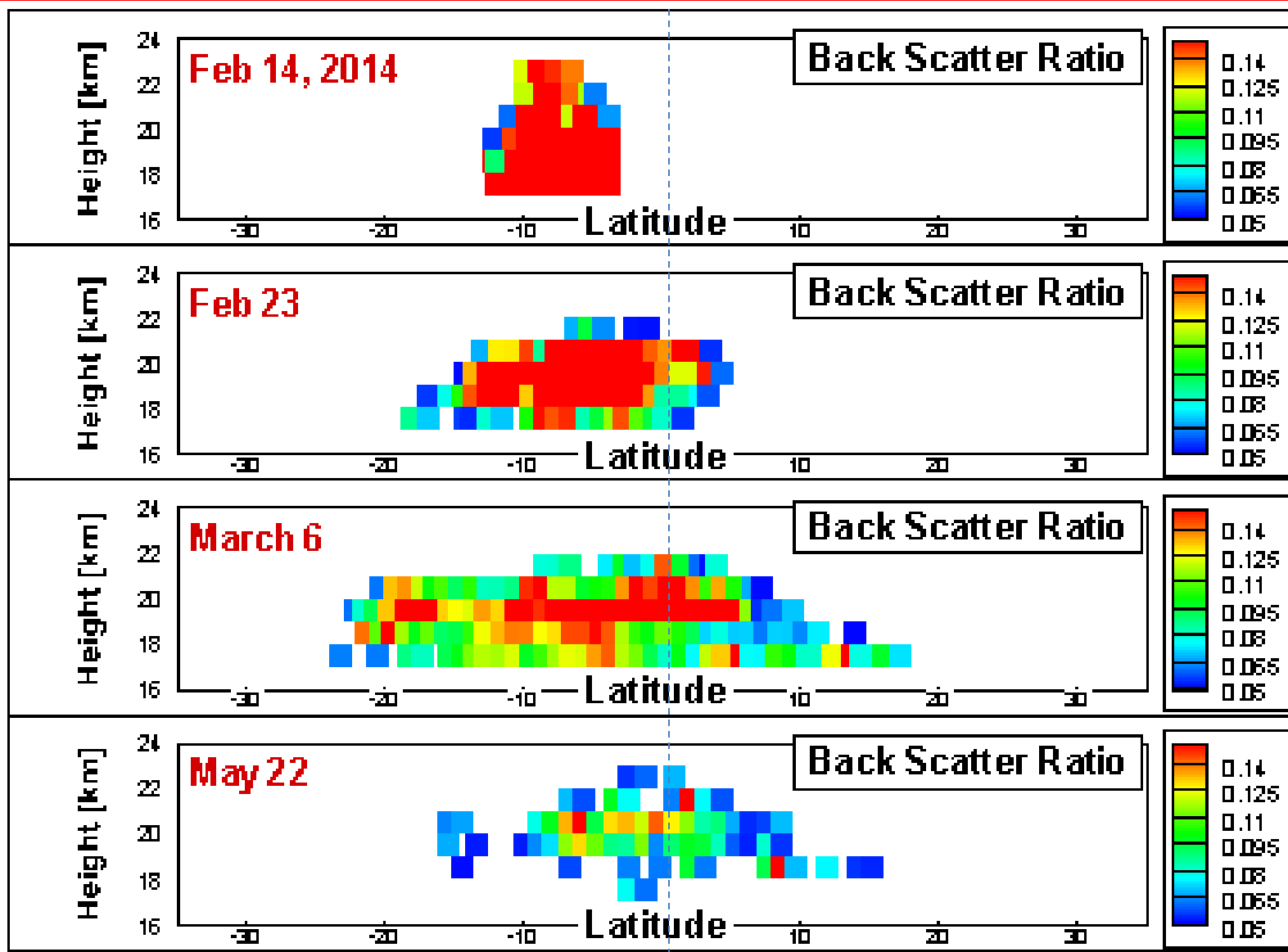
CALIPSO Scattering Ratio (modified)
Convolved with OMPS/LP FOV (Gaussian FWHM=1.5km)



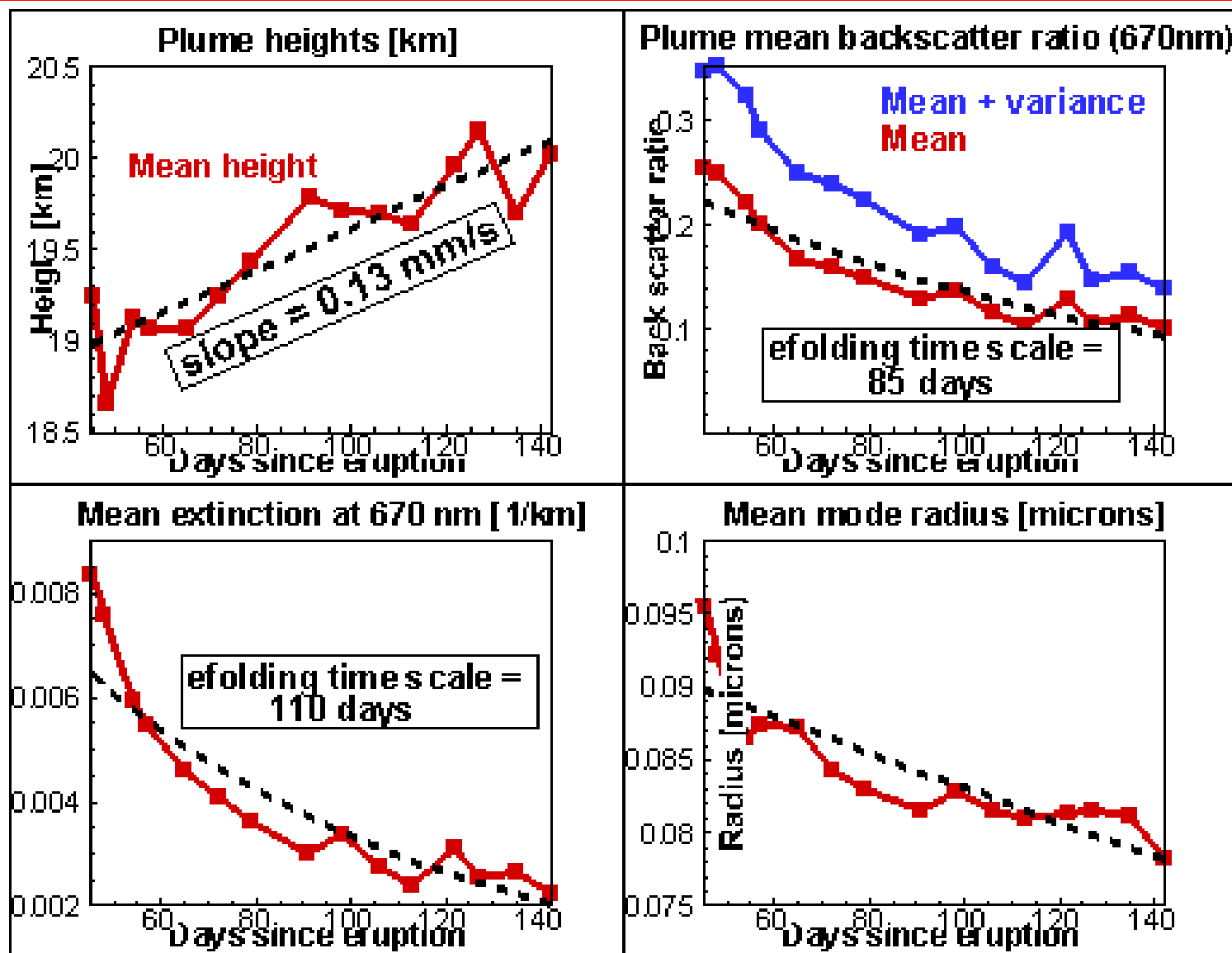
OMPS/LP Back Scattering Ratio
Last 2 weeks in March 2014



Plume evolution in time (1)



Plume evolution in time (2)



Estimate of total aerosol mass within Kelut plume

